

AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

Claims 1-39 (Canceled)

40. (Withdrawn) A method for verifying data integrity communicated between an operator interface and a remote control device, the operator interface and remote control device having associated device numbers, said method comprising:

communicating a signal on a channel between the operator interface and the remote control device, the signal including a device number, channel number, and checksum;

receiving the signal including the device number, channel number, and checksum;

verifying the checksum to confirm integrity of the signal;

determining if the channel and the channel number match; and

determining if the transmitted device number corresponds to the device number of the remote control device.

41. (Withdrawn) The method according to claim 40, further comprising:

determining that data integrity is invalid; and

utilizing, by the remote control device, a last set of valid data.

42. (Withdrawn) The method according to claim 40, further comprising:

determining that data integrity is invalid; and

disabling the remote control device.

43. (Withdrawn) The method according to claim 40, wherein the remote control device is a

robot.

44. (Withdrawn) The method according to claim 40, wherein the determining of the channel occurs during a robot competition.

45. (Withdrawn) The method according to claim 40, wherein each of the device number, channel number, and checksum are transmitted in a single data packet.

46. (Withdrawn) A system for determining a channel of communication between an operator interface and a remote control device, the operator interface and remote control device having associated device numbers, said method comprising:

means for assigning the channel to the operator interface;

means for transmitting a signal on a first channel, the signal including a device number, channel number, and checksum;

means for selecting, by the remote control device, a second channel to receive the signal;

means for receiving the signal including the device number, channel number, and checksum;

means for verifying the checksum to confirm integrity of the signal;

means for determining if the second channel and the channel number match; and

means for determining if the transmitted device number corresponds to the device number of the remote control device.

47. (Withdrawn) The system according to claim 46, further comprising locking the channel of the remote control device.

48. (Withdrawn) The system according to claim 46, wherein the remote control device is a robot.

49. (Withdrawn) The system according to claim 46, wherein the determining of the channel occurs during a robot competition.
50. (Withdrawn) The system according to claim 46, wherein each of the device number, channel number, and checksum are transmitted in a single data packet.
51. (Withdrawn) The system according to claim 46, further comprising selecting a different channel if the second channel and channel number do not match.
52. (Withdrawn) A system for verifying data integrity communicated between an operator interface and a remote control device, the operator interface and remote control device having associated device numbers, said method comprising:
  - means for communicating a signal on a channel between the operator interface and the remote control device, the signal including a device number, channel number, and checksum;
  - means for receiving the signal including the device number, channel number, and checksum;
  - means for verifying the checksum to confirm integrity of the signal;
  - means for determining if the channel and the channel number match; and
  - means for determining if the transmitted device number corresponds to the device number of the remote control device.
53. (Withdrawn) The system according to claim 52, further comprising:
  - means for determining that data integrity is invalid; and
  - means for utilizing, by the remote control device, a last set of valid data.
54. (Withdrawn) The method according to claim 52, further comprising:
  - determining that data integrity is invalid; and
  - disabling the remote control device.

55. (Withdrawn) The system according to claim 52, wherein the remote control device is a robot.

56. (Withdrawn) The system according to claim 52, wherein the determining of the channel occurs during a robot competition.

57. (Withdrawn) The system according to claim 52, wherein each of the device number, channel number, and checksum are transmitted in a single data packet.

Claims 58-76 (Canceled)

77. (Currently Amended) A method for providing safety at a robot competition, said method comprising:  
commencing the robot competition; and  
providing a remote disabling mechanism for the robot competition, the remote disabling mechanism operable to selectively disable at least one robot a plurality of robots independent of [[a]] person persons operating the at least one robot plurality of robots.

78. (Currently Amended) The method according to claim 77, wherein the selective disable includes disengaging power to the at least one robot plurality of robots.

79. (Currently Amended) The method according to claim 77, wherein the selective disable includes disabling control signals on the at least one robot plurality of robots.

80. (Original) The method according to claim 77, wherein the remote disabling mechanism is an emergency stop button being readily accessible and operable to disable all robots in a local vicinity of the emergency stop button.

81. (Original) The method according to claim 80, wherein the local vicinity is within approximately 500 feet of the emergency stop button.

82. (Currently Amended) A system for providing safety at a robot competition, said system comprising:

means for selectively disabling ~~at least one robot a plurality of robots~~ independent of a person persons operating the ~~at least one robot~~ plurality of robots; and

means, coupled to each robot, for disabling the ~~at least one robot~~ in response to the means for selectively disabling.

83. (Currently Amended) The system according to claim 82, wherein the means for disabling is operable to disengage selective disable includes disengaging power to the at least one robot plurality of robots.

84. (Currently Amended) The system according to claim 82, wherein the means for disabling is operable to disable selective disable includes disabling control signals on the at least one robot plurality of robots.

85. (Original) The system according to claim 82, wherein the disabling occurs for all robots in a local vicinity of the emergency stop button.

86. (Original) The system according to claim 85, wherein the local vicinity is within approximately 500 feet of the emergency stop button.

87. (Currently Amended) A system for providing safety at a robot competition, said system comprising:

a first device operable to selectively disable at least one robot independent of a person

operating the at least one robot, wherein the first device is located remotely from the at least one robot;

at least one first radio in communication with said first device;

a second radio, coupled to a robot and in communication with the at least one first radio, the second radio operable to receive a signal for disabling the robot; and

a second device operable to disable the robot in response to the signal for disabling the robot, wherein the second device is coupled to the robot.

88. (Original) The system according to claim 87, wherein the selective disable includes disengaging power to the at least one robot.

89. (Original) The system according to claim 87, wherein the selective disable includes disabling control signals on the at least one robot.

90. (Original) The system according to claim 87, wherein the remote disabling mechanism is an emergency stop button being readily accessible and operable to disable all robots in a local vicinity of the emergency stop button.

91. (Original) The system according to claim 90, wherein the local vicinity is within approximately 500 feet.